that permitted growth to take place, it still greatly retarded it. With further dilution the amount of retardation decreased until a point was reached when the action became stimulative and the rate of growth was considerably above the normal. This was to be expected, as sufficiently dilute solutions of many toxic salts are known to have a stimulating effect on plant growth. With still more dilution the stimulative effect became less marked until the normal rate of growth was again reached. Very unexpectedly, however, it was found that when dilutions were carried still further, instead of remaining at the normal, a distinct retardation of growth was again observed. As the dilution still increased another point was reached where the effect was stimulative though less strongly so than in the first case. Some of the series of dilution cultures showed as many as three distinct succeeding waves of depression and stimulation following each other with decreasing strength. Further experiments in this interesting field are in progress.

The second paper was by Mr. G. V. Nash on "A Collecting Trip to Haïti." It was illustrated by a large number of photographs and herbarium specimens and gave a graphic account of the experiences of a botanical collector in this interesting but little known country. The difficulties of travel are very great. No one is allowed to travel in the interior at all without thoroughly satisfactory letters to the authorities. Even with government permission secured, no accommodations for the white traveler could be found except for the unfailing hospitality of the priests, who are nearly all educated Frenchmen. They are very often the only white men in their districts.

The flora of the sea-shore is much the same as in the other West Indies, but as one goes toward the interior the character of the vegetation soon changes and a large proportion of interesting endemic species is found.

F. S. EARLE,
Recording Secretary.

NEWS ITEMS

Professor F. S. Earle, of the New York Botanical Garden sailed on February 25 for a few weeks' visit to Cuba.

Dr. William C. Sturgis, formerly mycologist of the Connecticut Agricultural Experiment Station, has been appointed lecturer on botany in Colorado College, Colorado Springs.

Dr. C. J. Chamberlain of the University of Chicago started for Mexico late in February to obtain material for use in his study of the spermatogenesis, oögenesis, and fertilization of the cycads *Dioon* and *Ceratozamia.*

Dr. H. N. Whitford, of the University of Chicago, is expecting to sail from San Francisco for Manila on March 26, to engage in botanical work under the direction of the United States Philippine Commission.

Professor L. R. Jones, of the University of Vermont, is enjoying a half-year's leave of absence from his collegiate and experiment station duties. He is now at the University of Michigan, but will go a little later to Europe.

Dr. D. T. MacDougal returned to New York on March 6 from a botanical expedition to Lower California and Arizona. He has brought back a large quantity of living and dried plants from the little-explored regions about the Gulf of California.

Two able and suggestive papers on eastern violets have recently been published, one by Mr. Witmer Stone under the title of "Racial Variation in Plants and Animals, with special Reference to the Violets of Philadelphia and Vicinity" printed in the *Proceedings of the Academy of Natural Sciences of Philadelphia* for October 1903 (issued December 4), and the other by President Ezra Brainerd under the title of "Notes on New England Violets" in *Rhodora* for January. Both are based on much continuous observation of colonies of living plants representing various species and forms. Dr. Brainerd emphasizes the diagnostic value of the mature capsules.